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# ATTENTION!

ALL PUBLIC WATER SUPPLY  
CONSUMERS! DOCUMENTS

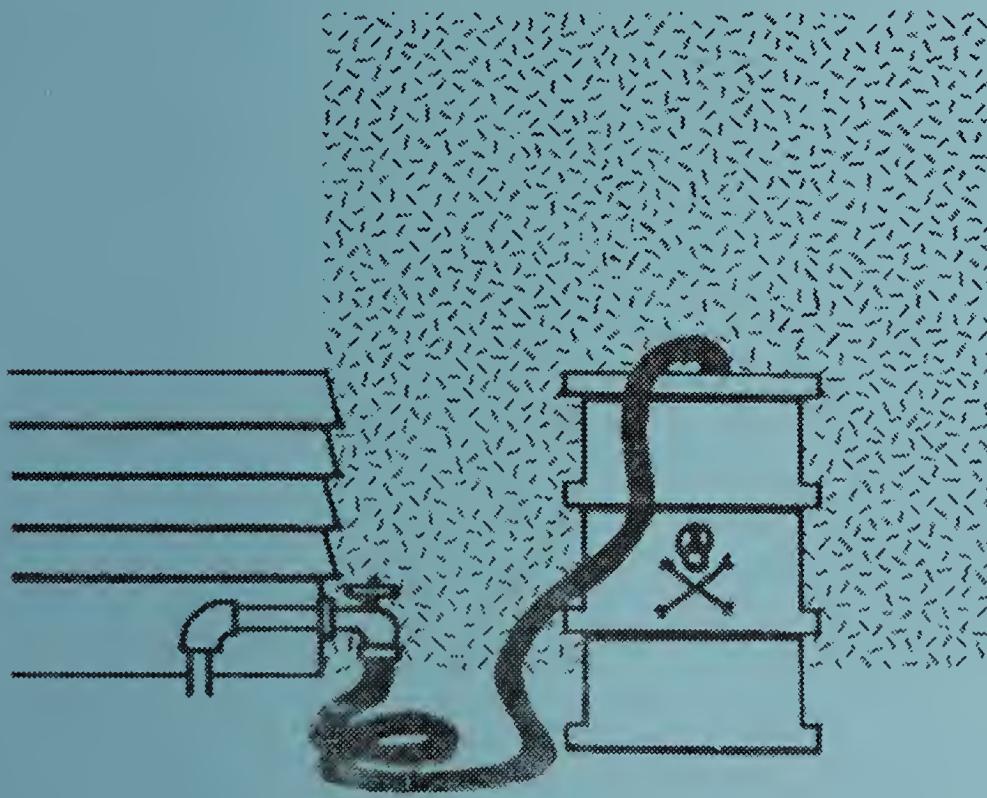
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WATER SUPPLY LIBRARY



LET'S PREVENT CONTAMINATION  
FROM ENTERING OUR  
WATER SUPPLY  
DISTRIBUTION SYSTEM

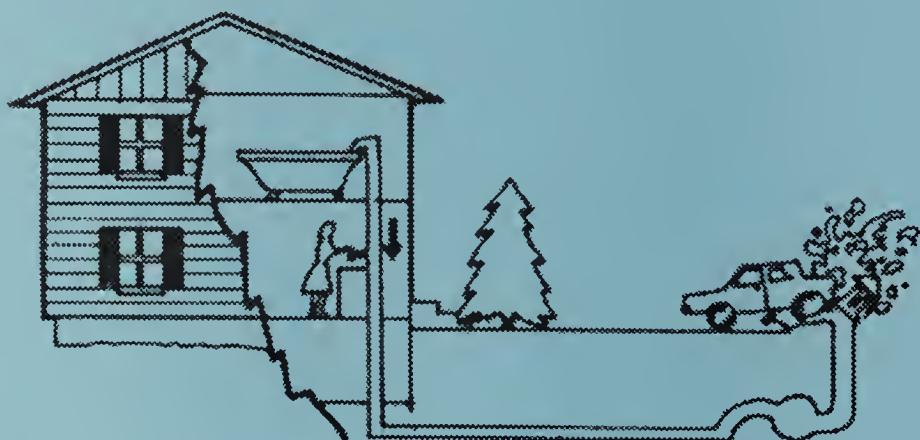


# HOW CAN YOU BE AFFECTED?

“Stomach flu” (gastroenteritis) is perhaps the most common ailment suffered by those drinking contaminated water. The Centers for Disease Control in Atlanta, Georgia and the U.S. Environmental Protection Agency have documented many cases directly attributing the following illnesses and others to contaminated drinking water.

Brucellosis	Giardiasis
Campylobacter	Hepatitis
Chemical Poisoning	Hookworm
Cholera	Paratyphoid Fever
Diarrhea Enteritus	Typhoid
Dysentry	Polio

A drop in pressure in the potable water system could result in a backflow or backsiphonage of contaminated material into the system and out the faucet.



## **Backflow Backsiphonage**

- A. Contact point: A submerged inlet in the second floor bathtub.
- B. Cause of Reverse Flow: An automobile breaks a nearby fire hydrant, causing a negative pressure in the service line to the house, sucking dirty water out of the bathtub.
- C. Suggested Correction: The hot and cold water inlets to the bathtub should be above the rim of the tub.

# **SOURCES OF CONTAMINATION WHICH REQUIRE ATTENTION**

## **IN THE HOME:**

Areas with plumbing fixtures:

Kitchen -- sink, dishwasher, disposal

Bathroom -- toilet, wash basin, bathtub, shower

Basement & Outdoors -- hose bib (faucet to which a hose may be attached), hobby area, workshop

## **AT WORK:**

Industrial, commercial and health facilities are subject to many types of cross-connections. Following are a few examples of commercial high hazard users.

Bottling Plants

Industrial Mixing Tanks

Fire Systems

Laboratories

Heating & Cooling Systems

Mortuaries

Hospitals

Paint and Ink Mills

Hydraulically Operated  
Equipment

Plating Works

## **AT LEISURE AREAS:**

Many recreational facilities have separate water systems and plumbing connections which also may be improperly installed and maintained. Some of these locations include:

Campgrounds

Golf Courses

County Fairgrounds

Swimming Pools

Parks and Playgrounds

Fountains

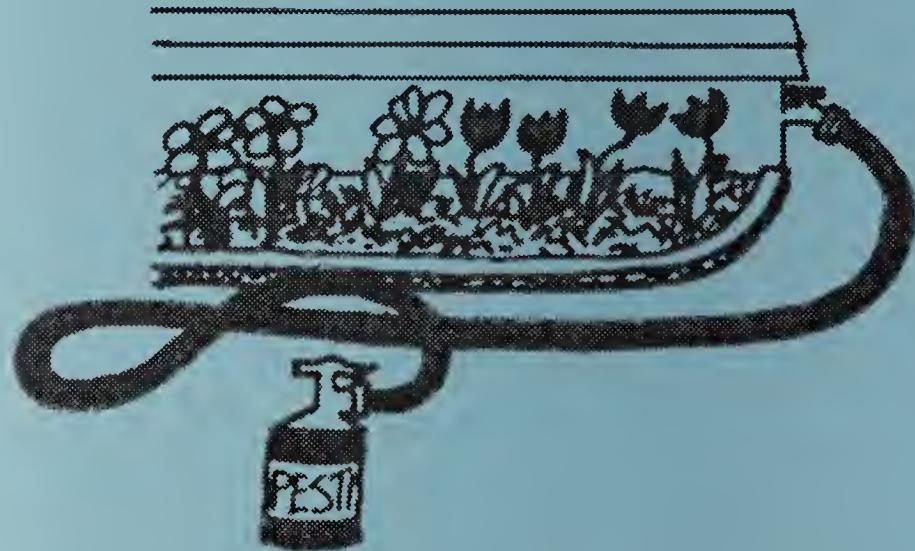
Yard Hydrants

## **EXAMPLES OF RESIDENTIAL CONTAMINATION**

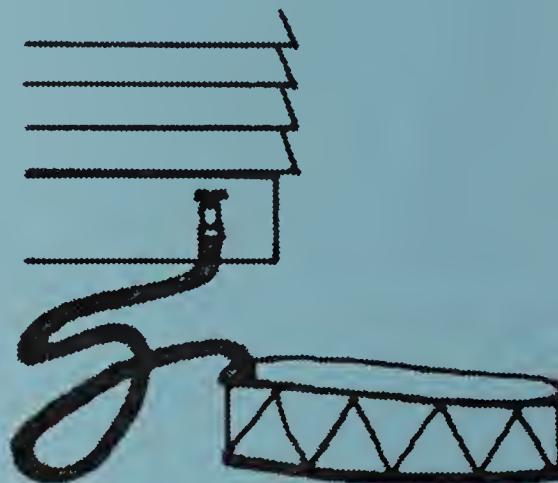
When a garden hose is not fitted with an approved cross-connection control device, occasional water pressure drops can occur in the public water supply distribution system or within our own residence.

Such water pressure drops can cause a reversal in the direction of water flow, commonly called "backflow". Backflow happens without warning when the pressure in our homes or within the public water supply drops.

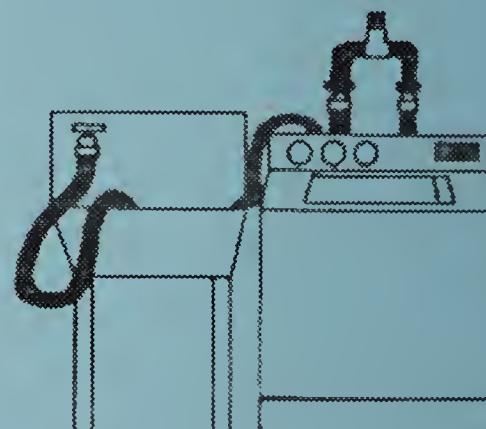
Water flow is then reversed in pipes, and may cause contaminants to be sucked into plumbing systems through unprotected hoses. Some residences may have used private wells or cisterns at some time in the past, but were later connected to the public water supply system. If the old well or cistern remains in operation, with valves to allow its use in the customer's water supply system, the potential for backsiphonage from that well water or cistern into the distribution exists. The private well or cistern must be completely and permanently disconnected from the public system.



**Backflow could transmit deadly poisons from this pesticide sprayer . . .**



**or dirty water from this wading pool . . .**



**or detergents from this laundry tub.**

## WHAT DOES THE LAW SAY?

"All premises intended for human habitation or occupancy shall be provided with a potable water supply. The potable water supply shall be protected from backflow and backsiphonage."

77 Ill. Adm. Code 890.1110

"The water distribution system shall be protected against backsiphonage and backflow."

35 Ill. Adm. Code 607.104(b)

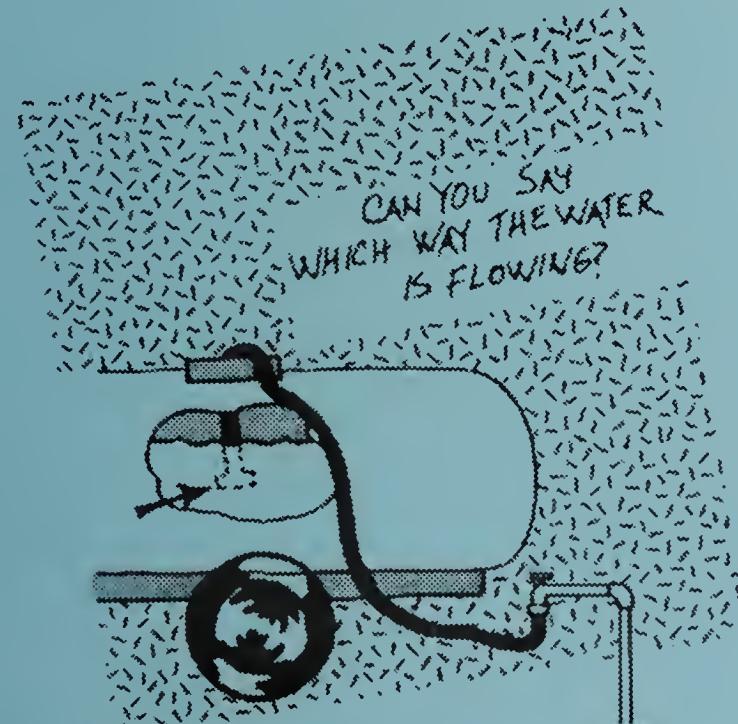
"There shall be no arrangement or connection by which any unsafe substance may enter a supply."

### Illinois Environmental Protection Agency Model Ordinance

"Be it ordained by the council of the city, State of Illinois. . ."

That the Superintendent of Water is hereby authorized and directed to discontinue, after reasonable notice, the water service to any property wherein a cross-connection exists.

"That the consumer responsible for backsiphoned material or contamination through backflow, if contamination of the potable water supply system occurs through an illegal cross-connection or an improperly installed, maintained or repaired device which has been bypassed, must bear the cost of cleanup of the potable water supply system."



# **HOW TO PREVENT ENTRY OF CONTAMINATION**

When the hazard of contamination exists, effective steps should be taken to correct the condition or backflow prevention devices should be installed on any internal system at the service connection.

Use only cross-connection control devices approved by the Illinois Department of Public Health, Illinois Environmental Protection Agency and this public water supply.

Awareness of how contamination can enter a system and installation of backflow or backsiphonage devices are necessary to effectively control these potentially hazardous connections.

Further information can be obtained from a licensed plumber or your public water supply officials.



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